



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/710,998	08/16/2004	Anand Shridhar SAWANT	TI-36864	4997
23494 7590 10/22/2009 TEXAS INSTRUMENTS INCORPORATED P O BOX 655474, M/S 3999 DALLAS, TX 75265				
EXAMINER MORRISON, JAY A				
ART UNIT		PAPER NUMBER		
2168				
NOTIFICATION DATE		DELIVERY MODE		
10/22/2009		ELECTRONIC		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

uspto@ti.com

### Office Action Summary

**Application No.**

10/710,998

**Applicant(s)**

SAWANT ET AL.

**Examiner**

JAY A. MORRISON

**Art Unit**

2168

**Period for Reply** -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 20 July 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 29-52 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 29-52 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SG/US)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### *Remarks*

1. Claims 29-52 are pending.

### *Claim Rejections - 35 USC § 103*

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation

under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

3. Claims 29-52 are rejected under 35 U.S.C. 103(a) as being unpatentable over Harmer (Patent Number 6,567,887) in view of Suzuki (Patent Number 6,604,170).

As per claim 29, Harmer teaches

A method for accessing a file in a file system in a protected area comprised in secondary storage of a digital processing system comprising a secure random access memory (RAM), the method comprising: (see abstract and background)

opening the file using a file open operation comprised in a file metadata processing module loaded in a shared execution portion of the secure RAM, wherein and stores a cluster identifier for each cluster in the sequence in a buffer comprised in a shared data portion of the secure RAM; (clusters of files stored in FAT table which is cached in RAM, column 6, lines 18-22 and 25-35)

accessing the file using a file access operation comprised in a file data processing module loaded in the shared execution portion, wherein the data processing module overlays at least a portion of the metadata processing module, (caching mechanism for FAT table, column 6, lines 6-11, where a cache inherently does not have the capacity to hold the entirety of a structure such as a hard drive) and wherein the file

access operation accesses a portion of data in the file using at least one cluster identifier stored in the buffer wherein the cluster identifiers are stored in the buffer such that each cluster identifier is locatable by an index computed using a cluster size and a start offset of data in the file. (query caching mechanism to determine information, column 6, lines 14-18)

Harmer does not explicitly indicate "the file open operation traverses a file access table (FAT) of the file system to determine a sequence of clusters allocated to the file".

However, Suzuki discloses "the file open operation traverses a file access table (FAT) of the file system to determine a sequence of clusters allocated to the file" (clusters of files retrieved and stored, column 9, lines 15-25).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine Harmer and Suzuki because using the steps of "the file open operation traverses a file access table (FAT) of the file system to determine a sequence of clusters allocated to the file" would have given those skilled in the art the tools to improve the invention by allowing faster access to files by storing important structures in faster memory. This gives the user the advantage of more efficient use of time and resources.

As per claim 30, Harmer teaches

the file access operation comprises: computing, based on a start index of the portion of data and the cluster size, an index into the buffer of a location of a cluster identifier of a cluster comprising a start of the data; using the index to retrieve the

cluster identifier from the buffer; computing an offset within the cluster of the start of the data; and issuing commands to access the data in the cluster starting at the offset.

(column 7, lines 15-25)

As per claim 31, Harmer teaches

the cluster identifiers are stored sequentially in the buffer in cluster allocation order. (column 7, lines 34-37)

As per claim 32, Harmer teaches

the sequence of clusters consists of all clusters allocated to the file. (column 7, lines 32-35)

As per claim 33, Harmer teaches

opening the file and accessing the file are preformed in a secure mode of the digital processing system. (column 7, lines 49-53)

As per claim 34, Harmer teaches

each file in the file system has a same number of clusters and the buffer is of a size to store a cluster identifier for all clusters in a file. (column 7, lines 30-34)

As per claim 35, Harmer teaches

the buffer is overwritten each time a file in the file system is opened. (column 7, lines 28-30)

As per claim 36, Harmer teaches

the secondary storage is a secure digital card. (column 8, lines 28-32)

As per claims 37-44 and 45-52,

These claims are rejected on grounds corresponding to the arguments given above for rejected claims 39-46, respectively, and are similarly rejected.

### ***Response to Arguments***

4. Applicant's arguments filed 7/20/2009 have been fully considered but they are not persuasive. Applicant argues that Suzuki does not disclose the newly added claims, however it is respectfully submitted that Suzuki teaches a method for advancing through FAT chain information until the file desired comes to an end (column 9, lines 15-30). The newly added Harmer reference teaches caching elements of a file system in RAM, such as the FAT tables (column 6, lines 1-11). When combined, the claimed caching of the chain of clusters from a FAT would have been obvious to one of skill in the art, since following the cluster chain in Suzuki and the caching of the FAT elements in Harmer would have led a person of skill in the art to produce the claimed invention.

***Conclusion***

5. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

The prior art made of record, listed on form PTO-892, and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jay A. Morrison whose telephone number is (571) 272-7112. The examiner can normally be reached on M-F 8-4:30.



If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tim Vo can be reached on (571) 272-3642. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Tim T. Vo/  
Supervisory Patent Examiner, Art Unit 2168

Jay Morrison  
TC2100

Tim Vo  
TC2100